

REMARKS

In the Office Action dated August 23, 2007, claims 1-12 were rejected under 35 U.S.C. §102(b) as being anticipated by NessAiver.

In substantiating this rejection of independent claims 1, 11 and 12, the Examiner cited column 6, line 53 through column 7, line 5 of the NessAiver reference as providing a teaching for generating and displaying the reference and motion-sensitized image series in an integrated manner. Although this may be a generally accurate statement concerning the NessAiver reference, the language of the independent claims is more specific, and requires that the anatomical image series and the speed-resolved image series be generated and displayed with each image in the speed-resolved image series being integrated in the time-corresponding image of the anatomical image series. In accordance with the present invention, this integration is direct, i.e., it is simply a matter of one image being integrated into the appropriate time-corresponding image in the other series, and it is only the time correspondence (i.e., the timing relationship of the respective images in the two series) that is used to achieve this integration.

Applicants submit that the NessAiver reference is not as straightforward on this point as the Examiner appears to assume. Both Applicants and their counsel have carefully reviewed the NessAiver reference, but find many ambiguities and questions concerning the actual content of the NessAiver disclosure, many of which have a direct bearing on this particular issue.

In column 6, line 53 through column 7, line 5, for example, NessAiver discloses that the generation of quantitative flow images takes place not only within a single cardiac cycle, but also within a single breath hold. If, as contended by the Examiner, in addition to the motion-sensitive image, the reference image in NessAiver also allegedly shows a movie of non-stationary tissue, why is a breath hold necessary at all? Applicants submit it is therefore not clear at all whether, in the NessAiver disclosure, the reference image also represents a movement comparable to that of the motion-sensitized images.

Additionally, as described in claim 6 of the NessAiver reference, in a reconstructing step, the motion-sensitized and reference echo signals of “each group” are reconstructed into separate reference and motion-sensitized frame images. It is not all clear, however, in the language of claim 6, or in the disclosure of NessAiver, as to what constitutes a “group.”

It is also not clear in the NessAiver reference why the reference image for each frame has to be sorted, as described at column 6, lines 57-59.

As noted above, in the subject matter disclosed and claimed in the present application, there is simply a time correspondence between the anatomical image series and the speed-resolved image series, and there is no need to undertake any sorting of images and/or division of k-space into different portions, as seem to be necessary in the NessAiver reference. Applicants do not believe the NessAiver reference could function as intended if *only* a time correspondence were used in the manner described in the claims of the present application. In fact, it appears that the aforementioned sorting or k-space division are actually used to *create* some sort of

artificial timing relationship, and it is this artificial timing relationship that is then used in the image reconstruction.

The approach disclosed and claimed by the present Applicants is much more simple and straightforward, by undertaking the integration of the respective images in the two series directly, based only on the aforementioned time correspondence.

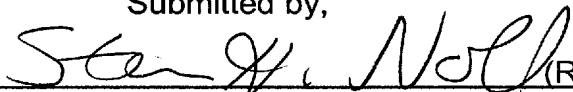
In view of these basic questions and discrepancies and ambiguities that arise from the NessAiver disclosure, Applicants respectfully submit that it is only by having had the benefit of first reading the Applicants' disclosure that the Examiner has been able to make sense of the NessAiver disclosure. Applicants respectfully submit that it would be virtually impossible for a person of ordinary skill reading the NessAiver disclosure to discern a method, apparatus or computer-readable medium, as claimed in the present application, based on the content of that disclosure. As the Examiner is aware, many decisions of the United States Court of Appeals for the Federal Circuit require that an anticipating reference must put the claimed subject matter "in the possession of the public." An unclear and ambiguous disclosure such as the NessAiver disclosure certainly does not satisfy that standard for anticipation.

Dependent claims 2-10 add further steps to the novel method of independent claim 1, and are therefore not anticipated by NessAiver for the same reasons discussed above in connection with the independent claims.

All claims of the application are therefore submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required, or to credit any overpayment to account No. 501519.

Submitted by,

 (Reg. 28,982)

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